CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-03/591e/CEMENT/2017-18 Date: 14.03.2018

TEST REPORT ON CEMENT

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements of Asphalting at pipeline attached roads and near Cavery Pump House in Mallasandra Ward No.13, Shettyhalli, Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/219/2017-18 Dated:07.02.2018
* Sample ID	:	Cement
Sample Received on	:	12.03.2018
Period of Testing	:	12.03.2018 to 14.03.2018

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988 (RA-2014)	30.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	165 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988 (RA-2014)	485 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988 (RA-2014)	1 mm	Not more than 10mm

*Information is furnished by the Customer/Representative.

Civil-Tech Consultants & Engineers Bangalore

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

****

VIDYARANI P.K.
Technical Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-03/591e/SAND-Gradation/2017-18 14.03.2018

TEST REPORT ON SIEVE ANALYSIS OF FINE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements of Asphalting at pipeline attached roads and near Cavery Pump House in Mallasandra Ward No.13, Shettyhalli, Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/219/2017-18 Dated:07.02.2018
* Sample ID	:	Fine Aggregates
Technical Reference	:	IS : 2386 (Part 1) - 1963 (RA-2011)
Sample Received On	:	12.03.2018
Date of Testing	:	14.03.2018

Total Wt. of Aggregates in gms = **1000**

IS Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2011)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	100	100	100	100
4.75	95.80	90-100	90-100	90-100	95-100
2.36	70.30	60-95	75-100	85-100	95-100
1.18	38.80	30-70	55-90	75-100	90-100
600 Micron	16.30	15-34	35-59	60-79	80-100
300 Micron	9.80	5-20	8-30	12-40	15-50
150 Micron	7.30	0-10	0-10	0-10	0-15

* Information is furnished by the Customer/Representative

Remarks : This sample is under Zone-I specific limits.

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

****

VIDYARANI P.K.
Technical Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-03/591c/Kerb Stone/2017-18 19.03.2018

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CORE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of work	:	Improvements of Asphalting at pipeline attached roads and near Cavery Pump House in Mallasandra Ward No.13, Shettyhalli, Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/219/2017-18 Dated:07.02.2018
* Sample ID	:	Precast Slab (100mm Thick)
* Grade of Concrete	:	M_{20}
Techinical Reference	:	IS:516-1959 (RA- 2013), SP-24:1983.
Sample Received on	:	16.03.2018
Date of Testing	:	19.03.2018

Sl. No	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x 1.08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	50.00	80.00	0.400	2546.48	1.60	0.957	31.20	15.89	17.16	17.94	22.42
2	50.00	80.00	0.410	2610.14	1.60	0.957	33.62	17.12	18.49	17.69	22.12
3	50.00	80.00	0.425	2705.63	1.60	0.957	33.02	16.82	18.16	17.38	21.72

* Information is furnished by the Customer/Representative

Civil-Tech Consultants & Engineers Bangalore

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

****

VIDYARANI P.K.
Technical Manager

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ಮಲ್ಲೇಶ್ವರಂ, ಬೆಂಗಳೂರು

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.:CTCE/BBMP/KRIDL/W.No.13/GSB-2/2017-18 21.03.2018

TEST REPORT ON GRADATION FOR CLOSE-GRADED GRANULAR SUB BASE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of work	:	Improvements of Asphalting at pipeline attached roads and near Cavery Pump House in Mallasandra Ward No.13, Shettyhalli, Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/219/2017-18 Dated:07.02.2018
* Sample ID	:	Close Graded-II
Technical Reference	:	IS : 2720 (Part - 4) 1985 (RA-2010), MORTH Table : 400-1
Date of Testing	:	21.03.2018

Oven Dry Wt (gm) : 5000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Specified Limits
53	0	0	0	100	100
26.5	345	345	6.90	93.10	70-100
9.5	1650	1995	39.90	60.10	50-80
4.75	655	2650	53.00	47.00	40-65
2.36	675	3325	66.50	33.50	30-50
0.425	660	3985	79.70	20.30	15-25
0.075	650	4635	92.70	7.30	3-10
PAN	365				
Total	5000				

Civil-Tech Consultants & Engineers Bangalore

* Information is furnished by the Customer/Representative

Remarks: Satisfies MORTH Specifications as per Table 400-1, Grading II

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

****

ನಷ್ಟಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಬೆಟ್ಟಳ್ಳಿ ಉಪವಿಭಾಗ, ಮಹದೇವಪುರ ವಲಯ
ಬಿಬಿಎಂಪಿ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬೆಂಗಳೂರು

Civil-tech Consultants & Engineers
#23/14, 7th Cross, 3rd Stage 4th Block,
Shakthi Ganapathinagar,
Basaveshwaranagar, Bangalore-560 079.

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/KRIDL/W.No.13/GSB-II/AL/2017-18 21.03.2018

TEST REPORT ON ATTERBERG LIMITS TEST FOR GRANULAR SUB BASE

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of work	:	Improvements of Asphalting at pipeline attached roads and near Cavery Pump House in Mallasandra Ward No.13, Shettyhalli, Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/219/2017-18 Dated:07.02.2018
* Sample ID	:	GSB (Close Graded-II)
Technical Reference	:	IS : 2720 (Part - 5) 1985 (RA-2010), MORTH Table : 400-1
Date of Testing	:	21.03.2018

Tests on filler screen materials (As per Table : 400-13)

Sl. No.	Particulars	Test Results	Standards as per Specifications
1	Liquid Limit, %	22.50	25.0% Maximum.
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

* Information is furnished by the Customer/Representative

Remarks: Satisfies MORTH Specifications as per Table 400-1, Grading II

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

****

Civil-tech Consultants & Engineers
#23/14, 7th Cross 3rd Stage 4th Block,
Shakthi Ganapathinagar,
Basaveshwaranagar, Bangalore-560 079.

Scanned by CamScanner